UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

November 9, 2015

Cecilia R. Seesholtz
Forest Supervisor
Boise National Forest
1249 South Vinnell Way, Suite 200
Boise, Idaho 83709

Dear Ms. Seesholtz:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act and the Council on Environmental Quality regulations for implementing NEPA, the U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the proposed Becker Integrated Resource Project located on the Idaho City Ranger District of the Boise National Forest in Boise County, Idaho. (EPA Region 10 Project Number: 14-0029-AFS)

The 19,327 acre Becker project lies within the Middle Crooked River and Pikes Fork subwatersheds. The DEIS analyzes the No Action Alternative and Action Alternatives B, C, D, and E. We support the overall Purpose and Need, which includes four elements:

- contribute to the restoration of low-to-mid elevation forests;
- improve watershed conditions by reducing motorized route related impacts to water resources, fish, soil and habitat;
- improve the quality and diversity of recreational opportunities; and
- provide enhanced recreational opportunities, by utilizing wood products from the suited timber base, and by implementing forest restoration activities.

The DEIS identifies Alternative B as the USFS Proposed Action and selects Alternative C as the Agency's Preferred Alternative. The distinction between these alternatives is related to different proposed management for recreational transportation. Under Alternative C, a motorized transportation route to the Stargazer and Skyline yurts would be open seasonally compared to year-round closure under Alternative B. Also under Alternative C, fewer roads would be converted to Maintenance Level 2 "administrative use only," and winter motorized restrictions on an additional 3,039 acres (currently 7,491 acres) would be included. Both of the alternatives would decommission 22.8 miles of road and propose similar vegetation treatments. Other action alternatives consist of additional vegetation treatments (Alt D), no designated motorized trails (Alt E), and additional recreation opportunities (Alt F).

We are pleased that all of the action alternatives include Riparian Conservation Area buffers, which are dependent on stream type and stand siting within or outside of a plantation. The no-cut zone buffer for perennial streams inside and outside of plantations are 35 feet and 50 feet respectively and 15 feet for intermittent streams in either location. Both the Middle Crooked River and Pikes Fork subwatersheds are designated as either functioning at risk, or functioning at unacceptable risk based on the indicators defined in the DEIS. We strongly support riparian conservation measures and watershed improvement

activities in the project area, particularly given the current declining conditions/ecological functions. We acknowledge that while there are no designated Clean Water Act §303(d) listed streams, monitoring has indicated that streams in the project area have elevated temperature, sediment, and in some cases nutrient loading. Elevated metals have also been observed in Pikes Fork from the Banner Mine adit.

We believe that the proposed activities would address important, underlying environmental functions by moving vegetation toward a desired range of age classes, size classes, species distributions, habitat complexity and landscape pattern. We support the inclusion of road decommissioning (22.8 miles) and culvert replacement (23) to address water quality and fish passage needs.

However, we have concerns regarding potential increases to surface water temperature that would result from vegetation treatments within RCAs and with the lack of a monitoring plan for the project area. We also have questions regarding validation of sediment delivery from roads and whether or not opportunities exist for additional watershed improvements. Based on our review we are rating the DEIS EC-2 (Environmental Concerns- Insufficient Information). Our attached comments focus on these areas of concern. We recommend that they be addressed in the final EIS.

Thank you for the opportunity to review the DEIS. If you need more information or would like to discuss these comments, please contact me at 206-553-1601 or by email at littleton.christine@epa.gov, or Lynne Hood of my staff at (208) 378-5757 or via email at hood.lynne@epa.gov.

Sincerely,

Christine B. Littleton, Manager
Environmental Review and Sediment Management Unit

Enclosures:
1. U.S. Environmental Protection Agency Detailed Comments
2. U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

EPA R10 DETAILED COMMENTS FOR
BECKER INTEGRATED RESOURCE PROJECT
DRAFT EIS

GENERAL COMMENTS

We found the review of this document to be challenging. The Becker Project is unique in that it includes numerous activities with multiple project purposes over a large project area. Given the complexity, we understand the challenges in developing a document that presents the components clearly, describes multiple interconnected activities' effects and benefits on natural resources, and incorporates sufficient detail to support conclusions concisely. We appreciate the Forest Service staff's time in talking with us about the project and assistance with locating information. We note that as written, the rationale behind project components is unclear.

An example is the discussion on "strata'- a categorization defined by fire regime and potential vegetation group (PVG) that form the basis of proposed treatments. It was difficult to understand the factors in relationship to overarching goals of the project. Supporting information was not easy to locate in the document. It would be helpful to provide a clear visual illustrating the treatments across the landscape. Also, it would be useful to include a summary of the goals/objectives per strata. Below are suggestions for improvement:

- The strata are explained in Table 3-2 (Page 144); however, the PVGs (factor of strata) for the site are not immediately explained; rather, they are included in Table 3-124 (Page 525). Please provide a description of the PVGs in the same section describing each strata.
- The current conditions are listed in a table, whereas the proposed activities are illustrated in a chart making it difficult to compare percent change (intensity of treatments needed per stand). We suggest comparing the information similarly.
- On the map illustrating the distribution of strata across the landscape, differences are indiscernible given the gray scale with six various shades of black and white with some very closely resembling others. Please provide a map that more clearly displays the strata.
- All of the alternatives include the same treatments per strata except Alternative D. However, the rationale for only modifying Alternative D is unclear. Also, it is not obvious if other treatments were or could be considered in the alternatives. Please clarify the rationale behind limiting variations in treatment to one alternative.

We also believe it would be helpful to expand the table of contents. The section pertaining to wildlife, Section 3.5, lists two subsections- Wildlife Habitat 3.5.1 and Source Habitat Families 3.5.2. However, this section is over 200 pages in length (264-469) with multiple subsections. Therefore, it is difficult to easily navigate to sections on specific species, Threatened and Endangered Species, special status species, and current conditions/effects analysis.

Overall, the document would benefit from including summaries and identifying the rationale or themes among the alternatives. We recommend considering opportunities to clarify information, link concepts more closely and organize information to be more traceable. Specific examples include:

- *Provide a description upfront about the strata classification, fire regimes, and potential vegetation group.*
- *Include an expanded table of contents.*

Comparison of Alternatives
We spent a significant portion of our review obtaining clarifying information regarding the rationale behind, and the differences among alternatives. To assist readers in understanding the context, the document could include a short section summarizing the underlying objective of each alternative. Also, providing a simple table comparing the general benefits among alternatives (recreation, commercial harvest, watershed improvements, RCA), would more clearly highlight the different effects and benefits.

For example, Alternative E includes the theme "emphasis on resource benefits/watershed improvements while providing for social and economic benefits." However, it is unclear how these objectives would be accomplished when compared to the other alternatives. The main difference appears to be that no motorized trails would be designated under Alternative E; however, Alternative D includes this same feature. We suggest highlighting the context of each alternative. One option would be to characterize alternatives with a theme (e.g., similar to Alternative E) and include a table comparing the benefits either by rank or another simplified format. This would provide the reviewer with an overall perspective of action alternatives, while referring to alternatives/resource sections for the specific detailed analyses.

It would also be helpful to more clearly compare transportation options among alternatives. There are multiple transportation-related tables in the DEIS and numerous maps (Appendix J), which aim to provide specific information on the options. However, the document does not include a concise summary or a discussion of the 'big picture' to understand how components satisfy the overarching goals. The maps include dozens of routes with an extensive legend. Therefore, it was difficult to compare and contrast differences listed in the tables with respect to their location on the landscape. It would be helpful to display the information on a map such that major differences are highlighted to facilitate a more appreciable comparison of the alternatives.

We recommend that the final EIS:

- *Include the rationale for designing alternatives and a simplified comparison providing a broader perspective of effects and benefits.*
- *Provide a map that clearly illustrates the differences in transportation options among alternatives.*

Characterization of Riparian Conservation Areas and Stream Temperature
Our major concerns regarding the proposed vegetation treatments are potential adverse effects on water quality and potential impacts on riparian areas that support critical ecological processes. The DEIS does not clearly describe current conditions in RCAs, identify treatments in riparian corridors with respect to watershed improvement goals, nor discuss how the proposed buffers would provide adequate shade necessary to support cold water habitat.

The DEIS describes RCA composition and treatments in general terms; more specificity is needed. In the DEIS, RCA composition is described as generally upland vegetation with narrow communities of riparian (moisture-influenced) vegetation channels. The document states that restoration actions within RCAs are needed to develop structure and function that facilitate terrestrial and riparian/aquatic processes, and to establish conditions that have greater integrity and resiliency. The document does not clearly describe the condition of particular stands in RCAs, the type of treatment proposed for a stand, nor how that treatment would move the site towards desired conditions. The project area is almost 20,000 acres and it is unclear where targeted riparian treatments would be warranted. The final EIS should include more site specific

information and more clearly describe riparian conditions. For your reference we offer the following examples with details that assist in more clearly understanding riparian conditions and functions:

- *Ogden Landscape Vegetation Management Project Final EIS.* 2012. Deschutes National Forest http://data.ecosystem-management.org/nepaweb/nepa_project_exp.php?project=31006
- *Wolf Fuels Vegetation and Fuels Management Final EIS.* 2014. Ochoco National Forest. http://data.ecosystem-management.org/nepaweb/nepa_project_exp.php?project=41946

The Preferred Alternative outlines vegetation prescriptions that would occur depending on location (inside or outside plantations), potential vegetation group, and fire regime. The DEIS includes a description of current forest density/basal area and proposed reduction based on this categorization. The proposal includes 2,327 acres of vegetation treatments within the RCA. However, the document does not specifically discuss current basal area, desired conditions, or change in basal area in RCAs. Therefore, it is unclear what degree of harvest would occur in these areas. It would be useful to provide a clear description of RCA conditions as explained above, along with specific treatments and how the proposal contributes to meeting desired future conditions for riparian habitat.

The Middle Crooked River and Pikes Fork subwatersheds are functioning at risk based on the temperature water quality indicator. Thinning and prescribed fire are allowed within the RCA. The RCA buffers include one site potential tree height (SPTH) for perennial streams to supply shade and benefit water quality. Within plantations, the non-commercial thinning buffer adjacent to streams is 35 feet, whereas outside plantations, the non-commercial thinning buffer is 50 feet. Literature and past studies have shown that reducing canopy cover within one SPTH can reduce stream shade and result in increased stream temperature. We are concerned about the potential adverse effects of proposed thinning within one SPTH on stream shade, particularly the buffer associated with plantations. The DEIS does not include a shade analysis (recommended during scoping) and therefore, the rationale behind the proposed treatment and desired upward trend towards "functioning acceptably" is unknown. We are concerned that without a thorough analysis, the proposed thinning within one SPTH may not be protective.

We understand the need for, and value of management within RCAs in some situations. Given the very sensitive nature of RCAs, the final EIS should better describe the rationale for the proposed thinning in these areas, including short and long-term impacts on shade. The EIS should demonstrate how the project will meet the targets in the Idaho Forest Practices Act Streamside Shade Rule (IDAPA 20.02.01). We are available to discuss technical approaches that we have used for similar shade analyses on other Idaho settings.

We recommend that the final EIS include:

- *Specific characterization of riparian areas and associated treatments.*
- *Demonstrate how proposed treatments would improve watershed conditions.*
- *Include a shade analysis of current conditions and potential effects.*

Transportation

High road density is a major factor contributing to poor watershed conditions. The desired condition for road density on the Forest is 0.7mi/mi^2 (Page 466). According to the DEIS, the current density is 4.0 mi/mi^2. A 0.1 to 0.2 mi/mi^2 reduction would be anticipated under Alternative C. The analysis includes results from the "Geomorphic Road Analysis and Inventory Package-lite" sediment delivery assessment across the two subwaterseheds. The document notes that stream conditions would improve somewhat over the long-term; however, based on the GRAIP-lite assessment, stream conditions are expected to

continue to be 'functioning at unacceptable risk' due to the number of roads located within RCAs. This raises a couple of questions related to this assessment.

It is our understanding that GRAIP-lite is intended to provide an initial understanding of problematic roads and sediment yield. The document should discuss the potential for conducting an on-the-ground GRAIP analysis on areas where sediment production is highest. This could assist in targeting roads for decommissioning/realignment and promoting improved watershed conditions.

Alternative C includes road decommissioning, closures to motorized use, new road construction, and conversion of roads to trail. The proposed transportation is not clearly linked to Purpose #2 "Improve watershed conditions by reducing motorized route related impacts to water resources, fish, soil and habitat." It is difficult to understand and compare proposed, specific route changes among alternatives (e.g., Alt B proposes 9.0 closures in RCA versus 7.9 closures with Alt C). The location and rationale of proposed road closings and those remaining in RCAs are unclear.

We also encourage the Forest Service to consider additional opportunities to address sediment loadings from roads either by incorporating such information into alternatives or describe any upcoming plans as future foreseeable actions.

We recommend consideration of incorporating full GRAIP analysis on high risk roads.

We recommend that the final EIS include clarifying information regarding proposed roads, particularly related to RCAs.

We recommend that the final EIS include a discussion of additional opportunities to improve watershed conditions and to specifically address problematic roads.

Monitoring

During scoping we recommended that the project include a monitoring program designed to assess impacts from the project, as well as track the implementation and effectiveness of measures taken to mitigate impacts. The DEIS includes monitoring information for specific sites, but not for the entire project area. For example, in Appendix H, the DEIS refers to the Pikes Fork Trailhead Rehabilitation and Monitoring Plan. It is unclear if this plan is currently in effect for the disturbed user-created ford or if it is proposed for a new trail that would be constructed.

A monitoring plan should be developed for the entire project that specifies monitoring goals/objectives, monitoring frequency, triggers/thresholds and associated action if thresholds are reached, and roles and responsibilities. The monitoring program should also describe how it would be used for present and future resources management, and whether there is likely to be support to fully implement the program (e.g., allocated funding).

We recommend that a robust, complete monitoring plan be included in the final EIS.

Additional Water Quality Opportunities

The DEIS mentions that elevated levels of metals (arsenic, cadmium, chromium, lead, mercury, and silver) that exceed state groundwater and drinking water standards have been documented at the Banner Mine in the Pikes Fork subwatershed. We encourage the USFS to include this issue in the cumulative effects analysis and disclose opportunities and actions that can be implemented to clean up contaminated mine sites.

SPECIFIC COMMENTS

Alternative B and C. The DEIS identifies Alternative B as the Proposed Action throughout the document. It was not immediately clear in the review of the document that Alternative C was the Preferred Alternative. The agency's Preferred Alternative is identified later in the document (on page 135 at the end of Chapter 2). It is helpful to have clarity on alternatives at the beginning and throughout the document with a clearly identified Preferred Alternative and Proposed Action for comparison (summary, tables, etc.).

Water Quality Standards Please include a table with applicable water quality standards in the discussion on temperature, sediment, etc. on Page 464. Also, please include the information on Page 464 in the Water Quality Section of the document.

List of Acronyms. Include "FA- Functioning Appropriately" in the list of acronyms.

Table 2-25, Page 133. The figures for Alternative A list zero under authorized roads. It would be helpful to include the existing system (USFS and Idaho Parks and Recreation) for comparison.

Page 95, Purpose 3. This section is the description of Alternative F; however, the text describes Alternative C. It is unclear if only the label is misprinted or if the description for Alternative F is missing. Please correct or clarify.

Page 418. The statement, "As noted, in total route density, Alternatives B, C, D, and F would result in negative trend, wild Alternative E would result in..." wild should be changed to while.

Page 509 and 527 and others in the DEIS. The reference in the last paragraph reads (Error! Reference source not found). This also occurs in a number of other sections in the document. Please include the appropriate reference.

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.